

**WHAT IS CLAIMED IS:**

## 1. A filter cap for an open-top cage comprising:

a substantially rigid filter frame adapted to cover said open top of said open top cage, said filter frame having a body portion with a perforated top wall and side walls extending therefrom forming an open bottom end,

a substantially rigid filter retainer sized to fit upon filter frame and to substantially cover said perforated top wall of said filter frame, said filter retainer having an upper surface with perforations substantially coextensive with the perforations on the top of said filter frame top wall, said filter retainer also having side walls extending from its upper surface forming an open bottom end, the perforations in said filter retainer being substantially in alignment with the perforations in said filter frame when said filter retainer is mounted on the top of said filter frame;

a chew shield being detachably secured to the undersurface of said filter frame so as to prevent animals within said open top cage from damaging said filter cap, said chew shield being sized to substantially cover the interior dimensions of said open top of said open top cage and having a lower surface with perforations substantially coextensive with the perforations found in said filter frame;

a first attachment means for detachably securing said chew shield to said filter frame; and

a second attachment means for detachably securing the filter retainer to said filter frame to permit enclosure of a sheet of filter material therebetween, said attachment means being integrally formed in said filter frame and said filter retainer.

## 2. The filter cap of claim 1, wherein said first attachment means comprises a plurality of snap rivets utilized to affix said chew shield to said filter frame.

3. The filter cap of claim 2, wherein said first attachment means is further comprised of a material selected the group consisting of:
  - a). nylon;
  - b). metal;
  - c). high impact plastic; and
  - d). ceramic.
4. The filter cap of claim 1, wherein said second attachment means comprises at least one detent formed on at least one side wall of said filter retainer, and at least one slot formed in at least one side wall of said filter frame disposed so as to receive said detent therein when said filter retainer is mounted on said filter frame.
5. The filter cap of claim 1, wherein said second attachment means comprises at least one detent formed in at least one side wall of said filter frame, and at least one slot formed in at least one side wall of said filter retainer disposed so as to receive the detent therein when said filter retainer is mounted on said filter frame.
6. The filter cap of claim 1, wherein said perforations on the lower surface of said chew shield are sufficiently small to prevent an animal within said cage body from causing substantial damage to said filter material enclosed between said filter frame and said filter retainer.
7. The filter cap of claim 1, wherein said filter retainer, said filter frame and said chew shield have sufficient flexure to allow said filter retainer, said chew shield and said filter frame to flex relative to each other.
8. The filter cap of claim 1, wherein said chew shield is composed of machined metal.
9. The filter cap of claim 1, wherein said filter cap and said filter frame are made of transparent material.
10. An animal isolation and caging system comprising:
  - a ventilated rack, said rack including at least one air-exhaust plenum;

at least one canopy attached to said rack for ventilation of cages housed in a said caging system wherein said rack is capable of supporting at least one cage level barrier cage within said rack below said at least one canopy while maintaining a gap between the top of said at least one cage and said at least one canopy so as to permit air to be drawn into said air exhaust plenum from the interior of said at least one cage through a top wall of the top of said at least one cage; and

a filter cap for an open-top cage, said filter cap comprising:

a substantially rigid filter frame adapted to cover said open top of said open top cage, said filter frame having a body portion with a perforated top wall and side walls extending therefrom forming an open bottom end,

a substantially rigid filter retainer sized to fit upon filter frame and to substantially cover said perforated top wall of said filter frame, said filter retainer having an upper surface with perforations substantially coextensive with the perforations on the top of said filter frame top wall, said filter retainer also having side walls extending from its upper surface forming an open bottom end, the perforations in said filter retainer being substantially in alignment with the perforations in said filter frame when said filter retainer is mounted on the top of said filter frame;

a chew shield being detachably secured to the undersurface of said filter frame so as to prevent animals within said open top cage from damaging said filter cap, said chew shield being sized to substantially cover the interior dimensions of said open top of said open top cage and having a lower surface with perforations substantially coextensive with the perforations found in said filter frame;

a first attachment means for detachably securing said chew shield to said filter frame; and

a second attachment means for detachably securing the filter retainer to said filter frame to permit enclosure of a sheet of filter material therebetween, said

attachment means being integrally formed in said filter frame and said filter retainer.